

SENIOR HEATING, VENTELATION & AIR CONDITIONING (HVAC)
TECHNICIAN

DEFINITION

To lead and participate in the installation, maintenance and repair on heating, ventilating and air conditioning systems in City facilities and buildings and related structures; to provide functional and technical lead guidance; and to perform related work as assigned.

DISTINGUISHING CHARACTERISTICS

This is the advanced journey or lead level class in the HVAC Technician series. Incumbents perform the full range of duties as assigned and receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Employees in this class are distinguished from the HVAC Technician II class in that the Senior level provides technical and/or functional guidance over assigned staff

SUPERVISION RECEIVED AND EXERCISED

Receives direction from an assigned supervisor.

Exercise technical and functional guidance over assigned staff.

ESSENTIAL FUNCTIONS – Functions may include, but are not limited to, the following:

To lead and participate in the installation, maintenance and repair of heating, ventilating and air conditioning systems in City facilities and buildings and related structures; perform the most skilled or complex duties.

Assist in the establishment of schedules and methods related to the installation, maintenance and repair of heating, ventilation, refrigeration and air conditioning systems and equipment and related projects; schedule staff to make repairs and equipment replacements; notify departments when making major repairs to systems.

Monitor work in progress at the work site; provide technical assistance to crews and direct corrections and modification as appropriate.

CITY OF CHULA VISTA
Senior HVAC Technician

Train and instruct new and less experienced employees in proper work methods, tools, equipment, and safety precautions; ensure safety of work sites by utilizing appropriate safety methods, equipment and devices, including traffic control.

Assist in the assignment and layout of work for staff including conducting pre-job inspections.

Provide functional and technical information to staff on mechanical systems and their operation; hold informal training as needed.

Discuss job assignments with staff to assess status and provide guidance where needed.

Maintain files for insurance purposes and Indoor Air Quality (IAQ) reviews; create and maintain database listings of all city heating, ventilating and air condition equipment including maintaining service and repair records of City's HVAC equipment.

Maintain and forecast supply budget for equipment replacement and upgrades, staffing requirements, vehicles and expendables; prepare cost estimates for minor and major Capital Improvement Projects.

Establish and assure adherence to preventive maintenance practice and schedule by staff.

Maintain air conditioning systems, air handlers, filters, blowers, cooling towers, water treatment, and other components of the system.

Install new and modifies existing equipment to upgrade; overhaul and repair reciprocating and centrifugal air compressors.

Repair electric motors and HVAC systems up to 480 volts after the main disconnect; replace bearings, pump seals and packing.

Program and operate the computerized energy management system.

Design and oversee installation of small HVAC systems.

Inspect, install, repair, maintain and adjust heating, air conditioning, refrigeration and related equipment and controls in City buildings and facilities; troubleshoots operating problems;

Perform and interpret chemical tests.

Plan, design, lay out assignments; reads and interprets plans, blueprints, schematics and specifications.

Estimate materials, tools and equipment needed for work assignments; order and pick up materials and supplies from outside vendors as appropriate.

Operates and maintains a wide variety of hand and power tools, shop tools and other equipment used in the trade.

Operate trucks and auxiliary equipment; observes safe work methods and safety precautions related to the work; cones and flags work sites to secure from traffic; uses appropriate safety equipment and devices; attends safety meetings; inspects and repairs safety hazards encountered in the course of the work;

Assist in developing specifications for contract work; inspects contract work for conformity to specifications; recommends remedial work as necessary

Respond to emergency situations in off-hours as required.

Keep work related records using a computer.

Operate City vehicles skillfully and safely.

In the absence of the supervisor, assume responsibilities as needed.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer services.

Perform other related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Methods, tools and equipment used in the maintenance and repair of heating, ventilating and air conditioning systems of large buildings.

Electronic and pneumatic control systems.

Operation and maintenance of a wide variety of hand, power and shop tools, test equipment and other equipment common to the field of HVAC and related building trades.

Practices of assigning and reviewing the work of others.

Pertinent rules, laws, codes and policies related to area of assignment.

Practices and procedures of traffic control and flagging.

Safe work methods and safety regulations pertaining to the work, including the use of personal protective equipment.

Principles and practices of conflict resolution.

Computer equipment and software applications related to assignment.

English usage, spelling, grammar, and punctuation.

Ability to:

Operating and maintaining specialized tools used in HVAC and related building trades.

Design, laying out and preparing sketches and plans for HVAC jobs.

Estimate necessary materials and equipment to complete assignments.

Reading and interpreting manuals, specifications, drawings, plans and blueprints.

Basic mathematical computations.

Train and instruct others in proper work methods and techniques.

Use and operate tools and equipment related to assignment, including personal protective equipment.

Keep work related records and prepare reports using a computer.

Work effectively at remote locations without direct supervision.

Operate City vehicles observing legal and defensive driving practices.

Follow oral instruction; read, interpret, follow and explain written instructions, construction sketches and equipment manuals.

Use initiative and sound independent judgment within established guidelines.

Communicate clearly and concisely, both orally and in writing.

Work overtime and off-hours shifts when necessary because of an emergency or in the interest of the efficiency of the department.

In the absence of a supervisor, assume responsibilities as needed.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Four years of responsible journey level experience in the maintenance and repair work of heating, ventilation, and air conditioning systems.

Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in HVAC or a related field.

License or Certificate

Possession of a valid California driver's license.

Possession of, or ability to obtain a current Environmental Protection Agency (EPA) Type II and III or a Universal Technician Certificate.

PHYSICAL DEMANDS

On a continuous basis, sit, stand, bend, climb ladders (up to 40 feet), stoop, kneel, crouch, crawl and twist for varying periods in the course of work; use hands and fingers to grasp tools; make repetitive hand and body motions; twist and reach below and above shoulder; lift or carry objects weighing up to 100 pounds; to communicate with co-workers using a two-way radio; use telephone, and write or use a keyboard to communicate through written means; see in the normal vision range with or without correction to read computer screen, blueprints, and drafting plans; hear in the normal range with or without correction.

WORK ENVIRONMENT

Work is performed both indoors and outdoors environments. Some work is performed with exposure to low to loud noise level; frequent fieldwork is required with exposure to a variety of weather conditions and the external environment; tasks may require working in tightly enclosed spaces and the use of ladders or other safety equipment to gain access to hard to reach locations; some work is performed in crawl spaces, attics or on rooftops. Some work may require exposure to unpleasant and potentially hazardous substances and high voltage.

4/03